CLAIMS



- 1. A video communication system comprising:
 - (a) at least one analog video-signal/source;
 - (b) at least one video display dev/ce;
 - (c) at least one control communication component configured
 - (i) to produce digital control-signals; and
 - (d) an unshielded twisted pair of wires
 - (i) defining a UTP communication path,
 - (ii) arranged for video-signal transportation,

wherein the system is configured to

- (i) multiplex
 - (1) analog video-signals,
 - a. / originating at one of the video-signal sources,
 - (2) with digital control-signals;
 - a from one of the control communication components
- (ii) transmi
 - (1) /the multiplexed signals
 - (2) | along the UTP communication path,
 - (3) to at least one of the video display devices, and
- (iii) use
 - (1) the control-signals
 - (2) to control reproduction of video images,
 - a. based on the video-signals,

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- on one of the video display devices.
- 2. The video communication system of claim 1, further comprising
 - (a) at least one analog audio-signal source; and
 - at least one audio reproduction device, (b)

wherein the system is configured to

- (i) multiplex
 - **(1)** the analog video-signals
 - **(2)** with the digital control-signals, and
 - **(3)** with analog audio-signals
 - originating at one of the audio-signal sources;
- (ii) transmit
 - **(1)** these multiplexed signals
 - along the UTP communication path; and **(2)**
- reproduce audio (iii)
 - based on the audio-signals **(1)**
 - **(2)** at one of the audio reproduction devices.
- 3. The system of claim 2, further comprising:
 - (a) at least one switch
 - in communication with the UTP communication path, (i) wherein the system is configured to
 - control the switch (i)
 - (ii) to route
 - **(1)** the multiplexed signals



- 4. The system of claim 3, further comprising:
 - (a) at least one server
 - (i) configured to
 - (1) control the switch.
- 5. The system of claim 2, further comprising
 - (a) at least two video display devices
 - (i) each having an associated processor
 - (ii) to each define a workstation, and

wherein the system is configured

- (i) to control the reproduction of video images and spoken audio
 - (1) of a first workstation user
 - (2) at the workstation of a second workstation user.
- 6. The system of claim 5, wherein the system is configured to
 - (a) reproduce the video images,
 - (i) at greater than 20 frames per second,
 - (ii) on at least one of the display devices.

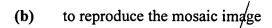


- 7. The system of claim 6, wherein the system is configured
 - (a) to combine video/images
 - (i) of at least a first and a second user
 - (ii) into a mosaic image, and

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- (i) on one of the vide display devices.
- 8. The system of claim 6, wherein the system is configured:
 - to allow a first user (a)
 - **(i)** to use a first graphical user interface
 - (ii) to select a user
 - (iii) from a plurality of users; and
 - **(b)** to allow the first/user
 - to use a/second graphical user interface (i)
 - (ii) to select a collaboration type
 - from a group of collaboration types; and (iii)
 - (c) to respond
 - (i) by establishing communication
 - of the selected collaboration type (ii)
 - between the first user and (iii)
 - (iv) the selected user.
 - the selected user.

The system of claim 2, comprising:

- (a) at least one processor
- (i) capable of providing data conferencing signals; wherein the system is configured to
 - display information, (ii)
 - **(1)** based on the data conferencing signals,



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The system of claim , wherein

- (a) images
 - (i) based on the video signals
 - (ii) can be displayed
 - (iii) in a first window on the display device, and
- (b) information
 - (i) based on the data conferencing signals
 - (ii) can be displayed
 - (iii) in a second window on the display device.

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The system of claim 9, wherein

- (a) the information
 - (i) based on the data conferencing signals
 - (ii) is displayed
 - (iii) interactively
 - (iv) on at least two of the display devices.

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A method of conducting a teleconference using a system including at least one video display device, and at least one video signal source

the method comprising the steps of:

- (a) generating analog video-signals,
 - (i) at one of the video-signal sources;
- (b) / producing digital control-signals;

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- (c) multiplexing
 - (i) the analog video-signals
 - (ii) with the control-signal's
 - (iii) onto at least one unshielded twisted pair of wires;
 - (1) defining a UTP communication path
- (d) transmitting the multiplexed signals
 - (i) along the UTP communication path; and
- (e) using the control-signals to
 - (i) control the reproduction of video images,
 - (1) based on the transmitted video-signals,
 - on one of the video display devices.

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The method of claim 12, wherein the system includes

at least one audio source and

at least one audio reproduction device,

the method further comprising the steps of:

- (a) transporting audio signals,
 - (i) originating at one of the audio sources;
 - (ii) over the UTP communication path; and
- (b) reproducing audio
 - (i) based on the transported audio signals
 - (ii) at one of the audio reproduction device.

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The method of claim 13, further comprising the step of:

(a) switching the signals



- 15. The method of claim 13, wherein the system includes
 - (a) at least two of the video display devices
 - (i) each having an associated processor
 - (ii) to each define a workstation.

the method further comprising the step of

(i) displaying images at a workstation.

- 16. The method of claim 15, wherein
 - (a) the video images are reproduced
 - (i) at greater than 20 frames per second,
 - (ii) at a workstation.

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The method of claim 15, further comprising the steps of:

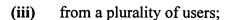
- (a) combining video images
 - (i) of at least a first and a second user
 - (ii) into a mosaic image, and
- (b) reproducing the mosaic image
 - (i) on at least one of the video display devices.

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The method of claim 1/3, further comprising the steps of:

- (a) allowing a first user
 - (i) to use a first graphical user interface
 - (ii) to select a user





- (b) allowing the first user
 - (i) to use a second graphical user interface
 - (ii) to select a collaboration type
 - (iii) from a group of collaboration types; and
- (c) responding
 - (i) by establishing communication
 - (ii) of the selected collaboration type
 - (iii) from the first user to
 - (iv) the selected user.

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The method of claim 15, further comprising the steps of:

- (a) generating data conferencing signals;
- (b) transmitting the data conferencing signals
 - (i) over at least one data communication path
- (c) displaying information,
 - (i) based on the transmitted data conferencing signals,
 - (ii) on at least one of the video display devices.

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The method of claim 19, further comprising the steps of:

- (a) reproducing images
 - (i) based on the video signals
 - (ii) in a first window on the display device, and
- (b) displaying information
 - (i) based on the data conference signals

21. A video communication system

for operation with an infrastructure including

at least one analog video-signal source;

at least one video display device; and

an unshielded twisted pair of wires

defining a UTP communication path

arranged for video signal transportation,

the system comprising:

(a) at least one control communication component configured to,

produce digital control-signals; and

wherein the system is configured to

- (i) multiplex
 - (1) analog video-signals,
 - originating at a video-signal source,
 - (2) with digital control-signals
 - from one of the control communication components,
- (ii) transmit the multiplexed signals
 - (1) along the UTP communication path;
 - (2) to at least one of the video display devices; and
- (iii) use the control-signals to
 - (1) control reproduction of video images,
 - a. based on the video-signals,
 - **b.** one of the video display devices.

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The video communication system of claim 21, wherein the infrastructure further includes at least one analog audio-signal source; and at least one audio reproduction device, and wherein the system is configured to

- (i) multiplex
 - (1) the analog video-signals
 - (2) with the digital control signals, and
 - (3) with analog audio-signals
 - a. originating at one of the audio-signal sources;
- (ii) transmit
 - (1) these multiplexed signals
 - (2) along the UTP communication path; and
- (iii) reproduce audio
 - (1) based on the audio-signals
 - (2) at one of the audio reproduction devices.

The system of claim 22,

- (a) wherein the control components are further configured to control
 - (i) a switch
 - (ii) to route the multiplexed signals
 - along the UTP communication path.

24. The system of claim 23, wherein the system further comprises:

- (a) at least one server
 - (i) configured to

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(1) control the switch



- 25. The system of claim 22, wherein the infrastructure further includes:
 - (a) at least two video display devices
 - (i) each having an associated processor
 - (ii) to each define a workstation, and

wherein the system is configured

- (i) to control the reproduction of video images and spoken audio
 - (1) of a first workstation user
 - at the workstation of a second workstation user.
- 26. The system of claim 25, wherein the system is configured to
 - (a) reproduce the video images;
 - (i) at greater than 20/frames per second,
 - (ii) on at least one of the display devices.
- 27. The system of claim 26, wherein the system is configured
 - (a) to combine video images
 - (i) of at least a first and a second user
 - (ii) into a mosaic image, and
 - (b) to reproduce the mosaic image
 - (i) on at least one of the video display devices.
- 28. The system of claim 26, wherein the system is configured:
 - (a) to allow a first user

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- (i) to use a first graphical user interface
- (ii) to select a user
- (iii) from a plurality of users; and
- (b) to allow the first user
 - (i) to use a second graphical user interface
 - (ii) to select a collaboration type
 - (iii) from a group of collaboration types; and
- (c) to respond
 - (i) by establishing communication
 - (ii) of the selected collaboration type
 - (iii) between the first user and
 - (iv) the selected user.
 - (v) the selected user.

The system of claim 24, wherein the system is configured:

- (a) to transport data conferencing signals
 - (1) originating at a processor,
 - (2) to at least one of the display devices,
- (b) display video images,
 - (1) based on the carried video signals,
 - (2) on the display device, and
- (c) display information,
 - (1) based on the carried data conferencing signals,
 - (2) on the display device.



The system of claim 29, wherein:

- (a) images
 - based on the video signals (i)
 - (ii) can be displayed
 - in a first window on the display device, and (iii)
- **(b)** information
 - **(i)** based on the data conference signals
 - (ii) can be displayed
 - (iii) in a second window on the display device.

The system of claim 29, wherein

- the information (a)
 - based on the data conferencing signals **(i)**
 - (ii) is displayed
 - (iii) interactively
 - (iv) on at least two of the display devices.